Virginia Title V Operating Permit

This permit is based upon the requirements of Title V of the Federal Clean Air Act and Chapter 80, Article 1 of the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act, and 9 VAC 5-80-50 through 9 VAC 5-80-300 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name: Solite, LLC Facility Name: Solite, LLC Facility Location: State Route 652, 1 mile west of Route 15 Arvonia, Virginia Registration Number: 30200 Permit Number VA-30200 December 3, 2001 Effective Date Amendment Date December 3, 2006 **Expiration Date** Director, Department of Environmental Quality

Table of Contents, 2 pages Permit Conditions, 24 pages

Signature Date

Table of Contents

I.	Facility Inform	ation	1
II.	Emission Units		2
	A. Significant	Emissions Units	2
		nt Emission Units	
III.	Fuel Burning E	quipment Requirements – Kilns (ID # K6, K7, K8)	6
	A. Limitation	S	6
		3	
	C. Recordkee	ping	7
	D. Testing		8
IV.	Process Equipn	nent Requirements – Lime Storage (ID # SU5)	8
	A. Limitation	S	8
	B. Monitoring	j	8
		ping	
	D. Testing		9
V.	Process Equipn	nent Requirements – bypass belt conveyor system	9
(ID #	RB10, SU4)		9
	A. Limitation	S	9
		<u></u>	
		ping	
	D. Testing		12
VI.	Reserved for E	quipment Owned and Operated by Giant Resource Recovery, Inc	12
VII.	Reserved		12
VIII	Reserved		12
IX.	Reserved for E	quipment Owned and Operated by Giant Resource Recovery, Inc	12
v			
Χ.	-	ements - Subpart EEE (Hazardous Waste Combustors)	
		S	
		J	
		n, Recordkeeping, and Reporting	
	_		
XI.	Reserved for E	quipment Owned and Operated by Giant Resource Recovery, Inc	14
XII.	Facility Wide C	Conditions	14

XIII. Peri	III. Permit Shield & Inapplicable Requirements				
XIV. Gen	eral Conditions	16			
A.	Enforceability	16			
B.	Permit Expiration				
C.	Recordkeeping and Reporting	17			
D.	Annual Compliance Certification				
E.	Permit Deviation Reporting	19			
F.	Failure/Malfunction Reporting	19			
G.	Severability	19			
H.	Duty to Comply	19			
I.	Need to Halt or Reduce Activity not a Defense	20			
J.	Permit Modification	20			
K.	Property Rights	20			
L.	Duty to Submit Information.	20			
M.	Duty to Pay Permit Fees	20			
N.	Fugitive Dust Emission Standards	21			
O.	Startup, Shutdown, and Malfunction	21			
P.	Alternative Operating Scenarios	22			
Q.	Inspection and Entry Requirements	22			
R.	Reopening For Cause	22			
S.	Permit Availability	23			
T.	Transfer of Permits	23			
U.	Malfunction as an Affirmative Defense	23			
V.	Permit Revocation or Termination for Cause	24			
W.	Duty to Supplement or Correct Application	24			
X.	Stratospheric Ozone Protection	25			
Y.	Accidental Release Prevention.	25			
Z.	Changes to Permits for Emissions Trading.	25			
AA.	Emissions Trading	25			

Permit Number: VA-30200

Page 1

I. Facility Information

Permittee

Solite, LLC P.O. Box 68 Arvonia, VA 23004

Responsible Official

Kirk Edens President

Facility

Solite, LLC State Route 652, 1 mile west of Route 15 Arvonia, VA 23004

Contact Person

Scott Roman Coordinator, Environmental Affairs (434) 581-3328

AIRS Identification Number: 51-029-00005

Facility Description: SIC Codes 3295, 4953 - Facility quarries shale/slate on-site and may also receive shale/slate from off-site. Raw materials are crushed and may be sold; however, most of the raw material is heated in rotary kilns which expand the shale/slate into light-weight aggregate clinker. Fuel for the kilns is primarily hazardous waste fuel but the kilns are also capable of firing natural gas, residual oil, distillate oil, coal, or any combination of these fuels.

Since the compliance demonstration for the kilns was conducted using hazardous waste as fuel, hazardous waste with gas or oil backup is the approved operating scenario under this permit. Should the permittee elect to operate the kilns using coal or oil as the primary fuel, a revised notification of compliance (NOC) is required. In that event, a significant amendment to the permit will be made in order to incorporate substantive elements from the NOC.

Giant Resource Recovery, Inc. (GRR), the hazardous waste fuel provider, is located adjacent to Solite. For Title V permitting purposes, Giant Resource Recovery and Solite are considered to be a single source. Despite their single source status with respect to air permitting, the plants have separate daily operations and responsibilities. At the request of the plant owners, the Title V permit was split so that each plant has the portion of the permit containing requirements applicable to its operation. In order to clarify the single source status for the facility, DEQ retained one source registration number while issuing 2 permit documents, each containing requirements for one plant and cross referencing requirements for the other. General provisions apply to each plant and are therefore contained in both documents.

Permit Number: VA-30200 Page 2

II. Emission Units

Equipment to be operated consists of:

A. Significant Emissions Units

A. SI	giiiiicani i	emissions Units					
Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
Fuel Burn	ing Equip	ment (Kilns)					
K6	BH6,7,8	Kennedy Van Saun rotary kiln (1952)	43 MM Btu/hr; 12 ton/hr	fabric filter	BH7, BH8	PM and PM HAPs	
K7	BH6,7,8	Kennedy Van Saun rotary kiln (1961)	57 MM Btu/hr; 16 ton/hr	fabric filter	BH7, BH8	PM and PM HAPs	
K8	BH6,7,8	Kennedy Van Saun rotary kiln (1966)	64 MM Btu/hr; 18 ton/hr	fabric filter	BH7, BH8	PM and PM HAPs	
Stone Pro	cessing Eq	uipment			•		
RC1	n/a	Pioneer 3546 crusher (1972)	300 tons/hr				
FC1	n/a	Telsmith 25x40 crusher (1972)	225 tons/hr				
RC2	n/a	Symons Std 4' Cone crusher	300 tons/hr				
FC2-4	n/a	Symons Std 4' Cone crusher	150 tons/hr				
RSE,RSW	n/a	Seco 6 x 14 Triple Deck	300 tons/hr				
RS7	n/a	Portec 3 x 6 wet screen	300 tons/hr				
RS8	n/a	Tyler 3 x 8 wet screen	300 tons/hr				
FS1-3	n/a	Telsmith 6 x 16 screen (1972)	300 tons/hr				
FS4-5	n/a	Telsmith 6 x 16 screen (1972)	300 tons/hr				
RB0	n/a	48" Solite Corp. conveyor (1972)	300 tons/hr				
RB1-2	n/a	30" Solite Corp. conveyor (1972)	300 tons/hr				
RB3-9	n/a	24" Solite Corp. conveyor (1972)		Water spray	RB3-10WS		
RB10	n/a	24" Solite Corp. conveyor (1993)	300 tons/hr				September 1, 1993

Solite, LLC Permit Number: VA-30200 Page 3

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
Stone Proc	cessing Equ	uipment (con't)					
RB11-14	n/a	Max. 36" Solite Corp. conveyor (1994)	300 tons/hr				
KB6a,7a	n/a	30" Solite Corp. conveyor	300 tons/hr				
KB6b,c,7b	n/a	24" Solite Corp. conveyor	300 tons/hr				
KB8a	n/a	30" Solite Corp. conveyor	300 tons/hr				
KB8b	n/a	24" Solite Corp. conveyor	300 tons/hr				
FB0	n/a	36" Solite Corp. conveyor	225 tons/hr				
FB1-4	n/a	30" Solite Corp. conveyor	225 tons/hr				
FB5-15	n/a	30" Solite Corp. conveyor	300 tons/hr				
FB16-19	n/a	24" Solite Corp. conveyor	300 tons/hr				
FB20-23, 25-26	n/a	30" Solite Corp. conveyor	300 tons/hr				
FB24	n/a	42" Solite Corp. conveyor	300 tons/hr				

Page 4

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
Storage Si	los and Bir	18					
SU1-2	n/a	storage silos (1961,1966)	800 tons				
SU3	n/a	storage silo (1972)	70 tons				
SU4	n/a	storage bin (1993)	15 tons	water spray	SU4WS	PM-10	September 1, 1993
SU5	SU5V	lime storage silo (1991)	30 tons	fabric filter	FR4	PM-10	May 21, 1991
SU6	n/a	storage bin (1972)	6069 ft ³				
SU7	n/a	storage bin (1972)	118 ft ³				
SU8-9	n/a	storage bin (1972)	279 ft ³				
SU10	SU10V	storage bin (1991)	443 ft ³	fabric filter	FR5,6	PM-10	
SU11	n/a	storage bin (1972)	163 ft ³				
5,6BeltBH	5,6BeltBHV	#5, #6 belts (1991)	9 tons/hr	fabric filter	FR1,2	PM-10	
BlockBH	BlockBHV	Block system (1998)	9 tons/hr	fabric filter	FR3	PM-10	

^{*}The Size/Rated capacity is provided for informational purposes only, and is not an applicable requirement.

Permit Number: VA-30200

Page 5

B. Insignificant Emission Units

The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
CSU5-9	coal storage	9 VAC 5-80-720 B	PM	
1	Kewanee boiler	9 VAC 5-80-720 B	PM, VOC, CO, NO _x ,SO ₂	
CB2-CB6	coal conveying	9 VAC 5-80-720 B	PM	
TA, TB	10,000 gallon storage tank	9 VAC 5-80-720 A		

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

Page 6

III. Fuel Burning Equipment Requirements – Kilns (ID # K6, K7, K8)

A. Limitations

1. Particulate emissions from the kilns (K6-K8) shall be controlled by the use of fabric filters.

(9 VAC 5-80-110)

2. The approved fuels for the kilns (K6-K8) are waste fuel, residual oils, diesel fuel, coal and any combination of the previous fuels. A change in the fuels may require a permit to modify and operate.

(9 VAC 5-80-110)

- 3. The permittee shall not cause or permit fuel with a sulfur content in excess of three pounds per million Btu to be used in the processing of lightweight aggregate. (9 VAC 5-80-110 and 9 VAC 5-40-2570)
- 4. Particulate emissions from the operation of the kilns shall not exceed the limits specified below:

Kiln #K6 42.1 lb/hr Kiln #K7 56.2 lb/hr

Kiln #K8 63.2 lb/hr

(9 VAC 5-80-110 and 9 VAC 5-40-2560)

- 5. Visible Emissions from each of the fabric filter stacks (BH6, BH7, and BH8) shall not exceed twenty percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed sixty percent opacity.
 - (9 VAC 5-40-2580 and 9 VAC 5-80-110)
- 6. Kiln emissions shall be controlled by proper operation and maintenance. Kiln operators shall be trained in the proper operation of all such equipment. Training shall consist of a review and familiarization of the facility's and manufacturer's operating instructions, if available.

(9 VAC 5-80-110)

B. Monitoring

1. Each fabric filter shall be equipped with a device to continuously measure the differential pressure drop across the fabric filter. The device shall be installed in an accessible location and shall be maintained by the permittee such that it is in proper working order at all times.

(9 VAC 5-80-110)

Page 7

2. Visual emission observations from each fabric filter exhaust stack shall be conducted at least once per week. If visible emissions are observed from any fabric filter, the permittee shall:

- a. Take timely corrective action such that the fabric filter resumes normal operation and there are no visible emissions from the fabric filter exhaust stack, or
- b. Perform a visible emission evaluation (VEE) in accordance with 40 CFR 60, Appendix A, Method 9 to assure visible emissions from the fabric filter do not exceed twenty (20) percent opacity. The VEE shall be conducted for a minimum of six minutes. If any of the 15-second observations exceed twenty (20) percent, the VEE shall be conducted for a total of 60 minutes. If compliance is not demonstrated by this VEE, timely corrective action shall be taken such that the fabric filter resumes operation with visible emissions of 20 percent or less.

Records shall be maintained, stating the date and time of each visible emissions check and whether visible emissions were observed, results of all VEEs, the observer's name and any required corrective action taken. Visible emissions checks are not required during start-ups, shut-downs, and malfunctions. These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-40-20)

C. Recordkeeping

- 1. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the South Central Regional Office. These records shall include, but are not limited to: the monthly and annual throughput of waste fuel, residual oil and diesel fuel (in 1000 gallons) and coal (in tons) for the kilns. The annual throughput shall be calculated as the sum of each consecutive twelve (12) month period. These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.
- 2. The permittee shall maintain records of the required training including a statement of time, place and nature of training provided. The permittee shall have available good written operating procedures and a maintenance schedule for the kilns and fabric filters. These procedures shall be based on the manufacturer's recommendations, at minimum. All records required by this condition shall be kept on site and made available for inspection by the DEQ.
 (9 VAC 5-80-110)

Permit Number: VA-30200

Page 8

D. Testing

The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.

(9 VAC 5-40-2630 and 9 VAC 5-80-110)

IV. Process Equipment Requirements – Lime Storage (ID # SU5)

A. Limitations

- 1. Particulate emissions from loading the storage silo shall be controlled by a fabric filter. The fabric filter shall be provided with adequate access for inspection. (9 VAC 5-80-110 and Condition 3 of May 21, 1991 Permit)
- Particulate emissions from the discharge of the storage silo shall be controlled by a closed pneumatic piping system to inject lime into the kilns.
 VAC 5-80-110 and Condition 4 of May 21, 1991 Permit)
- 3. The yearly throughput of lime shall not exceed 1314 tons, calculated monthly as the sum of each consecutive twelve (12) month period, and the daily throughput of lime shall not exceed 3.6 tons.

 (9 VAC 5-80-110 and Condition 5 of May 21, 1991 Permit)
- 4. Visible emissions from the fabric filter shall not exceed 5 percent opacity. (9 VAC 5-50-260, 9 VAC 5-80-110 and Condition 6 of May 21, 1991 Permit)

B. Monitoring

Visual emission observations from the fabric filter exhaust stack shall be conducted at least once per week. If visible emissions are observed, the permittee shall:

- a. Take timely corrective action such that the fabric filter resumes normal operation and there are no visible emissions from the fabric filter exhaust stack, or
- b. Perform a visible emission evaluation (VEE) in accordance with 40 CFR 60, Appendix A, Method 9 to assure visible emissions from the fabric filter do not exceed five (5) percent opacity. The VEE shall be conducted for a minimum of six minutes. If any of the 15-second observations exceed five (5) percent, the VEE shall be conducted for a total of 60 minutes. If compliance is not demonstrated by this VEE, timely corrective action shall be taken such that the fabric filter resumes operation with visible emissions of 5 percent or less.

Permit Number: VA-30200

Page 9

Records shall be maintained, stating the date and time of each visible emissions check and whether visible emissions were observed, results of all VEEs, the observer's name and any required corrective action taken. Visible emissions checks are not required during start-ups, shut-downs, and malfunctions. These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years. (9 VAC 5-50-20)

C. Recordkeeping

The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the South Central Regional Office. These records shall include, but are not limited to, the annual throughput of lime, calculated monthly as the sum of each consecutive twelve (12) month period. These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years. (9 VAC 5-50-50, 9 VAC 5-80-110 and Condition 8 of May 21, 1991 Permit)

D. Testing

The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.

(9 VAC 5-50-30 and 9 VAC 5-80-110)

V. Process Equipment Requirements – bypass belt conveyor system (ID # RB10, SU4)

A. Limitations

- 1. Particulate emissions from the bypass belt conveyor stone stockpile shall be controlled by wet suppression. There shall be no exemption from this requirement due to cold weather.
 - (9 VAC 5-80-110 and Condition 4 of September 1, 1993 Permit)
- 2. Particulate emissions from the bypass conveyor feed hopper charging shall be controlled by wet suppression. There shall be no exemption from this requirement due to cold weather.
 - (9 VAC 5-80-110 and Condition 5 of September 1, 1993 Permit)
- 3. Particulate emissions from the bypass belt conveyor feed hopper discharge and belt conveyor discharge shall be controlled by wet suppression. There shall be no exemption from this requirement due to cold weather.
 - (9 VAC 5-80-110 and Condition 6 of September 1, 1993 Permit)

Page 10

4. The yearly throughput of crushed stone with the bypass belt conveyor, feed hopper, and bypass belt conveyor stone stockpile shall not exceed 80,000 tons, calculated monthly as the sum of each consecutive twelve (12) month period.

(9 VAC 5-80-110 and Condition 7 of September 1, 1993 Permit)

- 5. Visible emissions from the bypass belt conveyor, feed hopper, and bypass belt conveyor stone stockpile emission points shall not exceed ten percent (10%) opacity. (9 VAC 5-50-260, 9 VAC 5-80-110, Condition 9 of September 1, 1993 Permit, and 40 CFR 60.672(b))
- 6. Particulate emissions from the operation of the bypass belt conveyor system shall not exceed the limitations specified below:

Total Suspended Particulate 1.7 lbs/hr 1.8 tons/yr PM-10 1.3 lbs/hr 1.4 tons/yr

These emissions are derived from the estimated overall emission contribution. Compliance with the annual emissions limits shall be determined as stated in Condition numbers V.A.4 and 5.

(9 VAC 5-80-110, 9 VAC 5-50-260 and Condition 8 of September 1, 1993 Permit)

- 7. Unless otherwise specified in this permit, the permittee shall operate the bypass belt conveyor, feed hopper, and bypass belt conveyor stone stockpile in compliance with New Source Performance Standards, Subpart OOO, Standards of Performance for Nonmetallic Mineral Processing Plants.
 - (9 VAC 5-80-110, Condition 5 of September 1, 1993 Permit, and 40 CFR 60.670)
- 8. Reasonable precautions shall be taken to prevent deposition of dirt on public roads and subsequent dust emissions. Dirt spilled or tracked onto paved surfaces shall be promptly removed to prevent particulate matter from becoming airborne.

 (9 VAC 5-80-110 and Condition 3 of September 1, 1993 Permit)
- 9. In order to minimize the duration and frequency of excess emissions due to malfunctions of air pollution control equipment, the permittee shall:
 - a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance. These records shall be maintained on site for a period of five (5) years and shall be made available to Department personnel upon request.
 - b. Maintain an inventory of spare parts that are needed to minimize durations of air pollution control equipment breakdowns.

(9 VAC 5-80-110 and Condition 17 of September 1, 1993 Permit)

Page 11

B. Monitoring

1. Visual emission observations from the bypass belt conveyor, feed hopper, and bypass belt conveyor stone stockpile emission points shall be conducted at least once per week. If visible emissions are observed, the permittee shall:

- a. Take timely corrective action such that the bypass belt conveyor, feed hopper, or bypass belt conveyor stone stockpile resumes normal operation and there are no visible emissions from the bypass belt conveyor, feed hopper, or bypass belt conveyor stone stockpile emission points, or
- b. Perform a visible emission evaluation (VEE) in accordance with 40 CFR 60, Appendix A, Method 9 to assure visible emissions from the bypass belt conveyor, feed hopper, or bypass belt conveyor stone stockpile emission points do not exceed ten (10) percent opacity. The VEE shall be conducted for a minimum of six minutes. If any of the 15-second observations exceed ten (10) percent, the VEE shall be conducted for a total of 60 minutes. If compliance is not demonstrated by this VEE, timely corrective action shall be taken such that the bypass belt conveyor, feed hopper, or bypass belt conveyor stone stockpile resumes operation with visible emissions of 10 percent or less.

Records shall be maintained, stating the date and time of each visible emissions check and whether visible emissions were observed, results of all VEEs, the observer's name and any required corrective action taken. Visible emissions checks are not required during start-ups, shut-downs, and malfunctions. These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-50-20)

2. The permittee shall perform Method 9 and/or Method 22 testing, in accordance with the requirements of 40 CFR 60.675(c)(3) and (4) and/or 40 CFR 60.675(d), annually on the bypass belt conveyor, feed hopper, and bypass belt conveyor stone stockpile emission points.

(9 VAC 5-50-20)

C. Recordkeeping

The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with South Central Regional Office. These records shall include, but are not limited to, the yearly throughput of crushed stone through the bypass belt conveyor stone stockpile, feed hopper, and bypass belt calculated monthly as the sum of each consecutive twelve (12) month period. These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years. (9 VAC 5-50-50, 9 VAC 5-80-110 and Condition 13 of September 1, 1993 Permit)

Permit Number: VA-30200

Page 12

D. Testing

The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.

(9 VAC 5-50-30 and 9 VAC 5-80-110)

- VI. Reserved for Equipment Owned and Operated by Giant Resource Recovery, Inc.
- VII. Reserved.
- VIII. Reserved.
- IX. Reserved for Equipment Owned and Operated by Giant Resource Recovery, Inc.
- X. MACT Requirements Subpart EEE (Hazardous Waste Combustors)

A. Limitations

- 1. For the purposes of this section, all terms used herein shall have the meaning given them in 40 CFR 63 Subpart A and 40 CFR 63 Subpart EEE. Requirements in this section apply only to the extent they are effective under 40 CFR 63 Subpart EEE. (9 VAC 5-80-110 and 40 CFR 63.1201)
- 2. The permittee shall comply with the requirements of 40 CFR Part 63 Subpart A, General Provisions, as indicated in 40 CFR Part 63 Subpart EEE, Table 1, General Provisions Applicability to Subpart EEE. (9 VAC 5-80-110 and 40 CFR 63.1200)
- 3. No later than the compliance date for existing sources as specified in 40 CFR 63 Subpart EEE, each hazardous waste burning lightweight aggregate kiln (K6-K8) shall meet the emission limits and destruction and removal efficiency (DRE) standards found in 40 CFR 63.1205, Standards For Hazardous Waste Burning Lightweight Aggregate Kilns.

(9 VAC 5-80-110 and 40 CFR 63.1205)

Permit Number: VA-30200 Page 13

4. No later than the compliance date for existing sources as specified in 40 CFR 63 Subpart EEE, the permittee shall demonstrate to DEQ (South Central Regional Office) that each kiln (K6-K8) is in compliance. The compliance demonstrations shall be in accordance with the Compliance Provisions of 40 CFR 64.1206. (9 VAC 5-80-110 and 40 CFR 63.1206)

- 5. The permittee shall operate in accordance with the Notification of Compliance (NOC) submitted to DEQ on May 11, 2004 and revised on January 31, 2005 (as summarized by permit application submittals dated March 29, 2004, June 18, 2004, October 27, 2004, November 19, 2004, and June 17, 2005 and by Attachments A and B of this permit). In the event of subsequent changes to the NOC, the permittee shall:
 - a. operate in accordance with the most recent NOC (based on postmark date of the submittal), and
 - b. together with the revised NOC, submit a permit modification application to incorporate the revision into the Title V permit.

(9 VAC 5-80-110 and 40 CFR 70.7(e)(2)(v)).

B. Monitoring

For each kiln specified in Condition X.A.3. of this permit (K6-K8), the permittee shall comply with the applicable requirements specified in 40 CFR 63.1209, Monitoring Requirements. However, compliance with the requirements to install, calibrate, maintain, and operate the PM CEMS is not required until such time that performance specifications and operations requirements applicable to PM CEMS have been promulgated.

In accordance with 40 CFR 63.1209, the permittee shall conduct monitoring as described in their most recent NOC submittal. Monitoring requirements based on the NOC are summarized in Attachments A and B of this permit. Adherence to the monitoring requirements summarized in Attachments A and B of the permit does not relieve the permittee of any additional or more rigorous monitoring requirements specified in 40 CFR 63.1209.

(9 VAC 5-80-110 and 40 CFR 63.1209)

C. Notification, Recordkeeping, and Reporting

1. The permittee shall provide notifications in accordance with the requirements of 40 CFR 63.1210. Such requirements include provisions of 40 CFR 63.9 of 40 CFR 63 Subpart A, as shown in 40 CFR 63 Subpart EEE, Table 1, General Provisions Applicability to Subpart EEE.

(9 VAC 5-80-110 and 40 CFR 63.1210)

Permit Number: VA-30200

Page 14

2. The permittee shall keep records and submit reports for each affected source subject to the requirements of 40 CFR Part 63 Subpart EEE, (K6-K8) in compliance with the recordkeeping and reporting requirements of 40 CFR 63.1211. Such requirements include provisions of 40 CFR 63.10 of 40 CFR 63 Subpart A, as shown in 40 CFR 63 Subpart EEE, Table 1, General Provisions Applicability to Subpart EEE. (9 VAC 5-80-110 and 40 CFR 63.1211)

D. Testing

The permittee shall perform tests on each kiln (K6-K8) as required by 40 CFR 63.7 and 40 CFR 63.1207, in order to demonstrate compliance with the standards specified in 40 CFR 63.1205. Testing shall be conducted per the test methods and procedures specified in 40 CFR 63.1208. Alternatively, previously obtained data may be submitted in lieu of testing, provided the data meet the quality criteria specified in 40 CFR 63.1207. (9 VAC 5-80-110, 40 CFR 63.1207, and 40 CFR 63.1208)

XI. Reserved for Equipment Owned and Operated by Giant Resource Recovery, Inc.

XII. Facility Wide Conditions

Existing source standard for visible emissions

Unless otherwise specified in this permit, no owner or other person shall cause or permit to be discharged into the atmosphere from any affected facility any visible emissions which exhibit greater than 20% opacity, except for one six-minute period in any one hour of not more than 60% opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). Failure to meet the requirements of this section because of the presence of water vapor shall not be a violation of this section. (9 VAC 5-40-80)

New source standard for visible emissions

Unless otherwise specified in this permit, no owner or other person shall cause or permit to be discharged into the atmosphere from any affected facility any visible emissions which exhibit greater than 20% opacity, except for one six-minute period in any one hour of not more than 30% opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). Failure to meet the requirements of this section because of the presence of water vapor shall not be a violation of this section. (9 VAC 5-50-80)

XIII. Permit Shield & Inapplicable Requirements

Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms

Permit Number: VA-30200

Page 15

and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of Applicability		
None identified.				

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by (i) the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law. (9 VAC 5-80-140)

Page 16

XIV. General Conditions

A. Enforceability

All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.

(9 VAC 5-80-110 N)

B. Permit Expiration

This permit has a fixed term of five years. The expiration date shall be the date five years from the date of issuance. Unless the owner submits a timely and complete application for renewal to the Department consistent with the requirements of 9 VAC 5-80-80, the right of the facility to operate shall be terminated upon permit expiration.

- 1. The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.
- 2. If an applicant submits a timely and complete application for an initial permit or renewal under this section, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 1, Part II of 9 VAC 5 Chapter 80, until the Board takes final action on the application under 9 VAC 5-80-150.
- 3. No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9 VAC 5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9 VAC 5 Chapter 80.
- 4. If an applicant submits a timely and complete application under section 9 VAC 5-80-80 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9 VAC 5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.
- 5. The protection under subsections F 1 and F 5 (ii) of section 9 VAC 5-80-80 F shall cease to apply if, subsequent to the completeness determination made pursuant section 9 VAC 5-80-80 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application.

Permit Number: VA-30200

Page 17

C. Recordkeeping and Reporting

- 1. All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:
 - a. The date, place as defined in the permit, and time of sampling or measurements.
 - b. The date(s) analyses were performed.
 - c. The company or entity that performed the analyses.
 - d. The analytical techniques or methods used.
 - e. The results of such analyses.
 - f. The operating conditions existing at the time of sampling or measurement.

(9 VAC 5-80-110 F)

- 2. Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

 (9 VAC 5-80-110 F)
- 3. The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ every six months. Each report must be postmarked within 30 days following each six-month reporting period. This report must be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:
 - a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31.
 - b. All deviations from permit requirements. For purposes of this permit, deviations include, but are not limited to:
 - (1) Exceedance of emissions limitations or operational restrictions;
 - (2) Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or compliance assurance monitoring which indicates an exceedance of emission limitations or operational restrictions; or,
 - (3) Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.

Permit Number: VA-30200

Page 18

c. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that "no deviations from permit requirements occurred during this semi-annual reporting period."

(9 VAC 5-80-110 F)

D. Annual Compliance Certification

Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to DEQ and EPA a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices. The time period to be covered by the certification is the calendar months January through December. Each report must be postmarked within 30 days following each annual period. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a)(3) and §504(b) of the federal Clean Air Act. This certification shall be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

- 1. The time period included in the certification. The time period to be addressed is January 1 to December 31.
- 2. The identification of each term or condition of the permit that is the basis of the certification.
- 3. The compliance status.
- 4. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance.
- 5. Consistent with subsection 9 VAC 5-80-110 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period.
- 6. Such other facts as the permit may require to determine the compliance status of the source.

One copy of the annual compliance certification shall be sent to EPA at the following address:

Clean Air Act Title V Compliance Certification (3AP00) U. S. Environmental Protection Agency, Region III 1650 Arch Street Philadelphia, PA 19103-2029.

(9 VAC 5-80-110 K.5)

Permit Number: VA-30200 Page 19

E. Permit Deviation Reporting

The permittee shall notify the South Central Regional Office, within four daytime business hours after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to General Condition XI.C.3. of this permit. (9 VAC 5-80-110 F.2 and 9 VAC 5-80-250)

F. Failure/Malfunction Reporting

In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as practicable but no later than four daytime business hours after the malfunction is discovered, notify the Director, South Central Regional Office by facsimile transmission, telephone or telegraph of such failure or malfunction and shall within 14 days of discovery provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. Owners subject to the requirements of 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Director, South Central Regional Office.

(9 VAC 5-20-180 C)

G. Severability

The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit. (9 VAC 5-80-110 G.1)

H. Duty to Comply

The permittee shall comply with all terms and conditions of this permit, including those terms and conditions set forth in a tabular format. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or, for denial of a permit renewal application. (9 VAC 5-80-110 G.2)

Page 20

I. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(9 VAC 5-80-110 G.3)

J. Permit Modification

A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9 VAC 5-80-50, 9 VAC 5-80-1100, 9 VAC 5-80-1790, or 9 VAC 5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios. (9 VAC 5-80-190 and 9 VAC 5-80-260)

K. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege. (9 VAC 5-80-110 G.5)

L. Duty to Submit Information

- The permittee shall furnish to the Board, within a reasonable time, any information that the Board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the Board along with a claim of confidentiality.
 (9 VAC 5-80-110 G.6)
- 2. Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-80 G. (9 VAC 5-80-110 K.1)

M. Duty to Pay Permit Fees

The owner of any source for which a permit under 9 VAC 5-80-50 through 9 VAC 5-80-300 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 through 9 VAC 5-80-350. The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the Department by **April 15** of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department. (9 VAC 5-80-110 H and 9 VAC 5-80-340 C)

Permit Number: VA-30200

Page 21

N. Fugitive Dust Emission Standards

During the operation of a stationary source or any other building, structure, facility, or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to, the following:

- 1. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;
- 2. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;
- 3. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or other similar operations;
- 4. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and,
- 5. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

(9 VAC 5-40-90 and 9 VAC 5-50-90)

O. Startup, Shutdown, and Malfunction

At all times, including periods of startup, shutdown, soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

(9 VAC 5-40-20 and 9 VAC 5-50-20)

Permit Number: VA-30200

Page 22

P. Alternative Operating Scenarios

Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80, Article 1. (9 VAC 5-80-110 J)

Q. Inspection and Entry Requirements

The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:

- 1. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.
- 2. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.
- 3. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.
- 4. Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9 VAC 5-80-110 K.2)

R. Reopening For Cause

The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-80 F.

1. The permit shall be reopened if the Board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

Permit Number: VA-30200

Page 23

2. The permit shall be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

3. The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-110 D.

(9 VAC 5-80-110 L)

S. Permit Availability

Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request.

(9 VAC 5-80-150 E)

T. Transfer of Permits

- 1. No person shall transfer a permit from one location to another, unless authorized under 9 VAC 5-80-130, or from one piece of equipment to another. (9 VAC 5-80-160)
- 2. In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9 VAC 5-80-200. (9 VAC 5-80-160)
- 3. In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9 VAC 5-80-200. (9 VAC 5-80-160)

U. Malfunction as an Affirmative Defense

- 1. A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the conditions of paragraph 2 are met.
- 2. The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:
 - a. A malfunction occurred and the permittee can identify the cause or causes of the malfunction.

Page 24

- b. The permitted facility was at the time being properly operated.
- c. During the period of malfunction, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit.
- d. The permittee notified the board of the malfunction within two working days following the time when the emissions limitations were exceeded due to the malfunction. This notification shall include a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notification may be delivered either orally or in writing. The notification may be delivered by electronic mail, facsimile transmission, telephone, telegraph, or any other method that allows the permittee to comply with the deadline. The notice fulfills the requirement of 9 VAC 5-80-110 F.2. b to report promptly deviations from permit requirements. This notification does not release the permittee from the malfunction reporting requirements under 9 VAC 5-20-180 C.
- e. In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof.
- f. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any applicable requirement.

(9 VAC 5-80-250)

V. Permit Revocation or Termination for Cause

A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9 VAC 5 Chapter 80 Article 1. The Board may suspend, under such conditions and for such period of time as the Board may prescribe, any permit for any of the grounds for revocation or termination or for any other violations of these regulations. (9 VAC 5-80-190 C and 9 VAC 5-80-260)

W. Duty to Supplement or Correct Application

Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit. (9 VAC 5-80-80 E)

Permit Number: VA-30200

Page 25

X. Stratospheric Ozone Protection

If the permittee handles or emits one or more Class I or II substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F.

(40 CFR Part 82, Subparts A-F)

Y. Accidental Release Prevention

If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined by 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68.

(40 CFR Part 68)

Z. Changes to Permits for Emissions Trading

No permit revision shall be required under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.

(9 VAC 5-80-110 I)

AA. Emissions Trading

Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:

- 1. All terms and conditions required under 9 VAC 5-80-110, except subsection N, shall be included to determine compliance.
- 2. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions that allow such increases and decreases in emissions.
- 3. The owner shall meet all applicable requirements including the requirements of 9 VAC 5-80-50 through 9 VAC 5-80-300.

(9 VAC 5-80-110 I)